

STUDIES OF AMERICAN PLANTS -- XXI

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CELASTRACEAE

MAYTENUS WENDTII Lundell, sp. nov. -- Arbor parva, ad 5 m. alta, 8 cm. diam., omnino glabra; folia alterna, magna, petiolata, petiolo 5--7 mm. longo, canaliculato; lamina subcoriacea, elliptica vel lanceolato-elliptica, 14--28 cm. longa, 7--11 cm. lata, apice subabrupte acuminata, basi rotundata et acutiuscula, integra, viridis; inflorescentia axillaris, aggregata, multiflora, glabra; flores 5-meri; pedicelli 3--4, raro ad 6 mm. longi; sepala coriacea, late rotundata, 1.4--1.6 mm. lata, 0.5--0.7 mm. longa, parce rufo-ciliolata; petala crassa, late ovata, ca. 1.8 mm. longa et lata, apice rotundata; discus rotundatus, crassus, ca. 3 mm. diam.; filamenta reflexa, ca. 1 mm. longa; antherae late ovatae, ca. 0.5 mm. longae; pedicelli fructiferi crassi; capsula obovata, ca. 1.7 cm. longa.

Mexico: Oaxaca, Municipio Sta. Maria Chimalapa, Arroyo Chocolin, poblacion de Nicolas Bravo, cerca del Rancho de Agustin Montero, ca. 3--4 km. al S de la poblacion de Rio Alegre (Veracruz), selva alta perennifolia con Dialium, Calophyllum, Symphonia, etc., cerco del arroyo, elev. 150 m., Oct. 21, 1983, Tom Wendt, A. Montero H. & I. Almaraz G. 4240 (holotype, LL), arbolito 5 m., 8 cm. diam., flores verde palidas, frutos anaranjado brillantes, bivalvados, arilo blanco, entero, ligeramente dulce-y-amargo. Oaxaca, Municipio Matias Romero, lomas al E de Arroyo Amaca, al N del Rio Verde, 9.5 km. por camino al SE de Aserradero La Floresta, ca. 21.5 km. al S de Esmeralda, lomas con suelos profundos, selva perennifolia, elev. 400 m., May 22, 1981, Tom Wendt, A. Villalobos, I. Navarrete & J. Anguiana 3286 (paratype, LL), arbolita de 2.5 m., pendiente en selva, flores amarillas.

Unusual in having large elliptic dark green leaves up to nearly one foot in length, and large 2-celled capsules with white aril, this is the most distinctive species of Maytenus in Mesoamerica. It is a pleasure to dedicate it to Dr. Tom Wendt who has discovered so many fine new taxa in his exploration of southern Mexico.

Since the species was collected on the border of Veracruz (Wendt et al. 4240), it should be considered one of the Celastraceae of that state.

VIOLACEAE

ORTHION GUATEMALENSE Lundell, sp. nov. -- Arbor, ad 20 m. alta, omnino glabra; ramuli crassiusculi; folia alterna, petiolata, petiolo 6--10 mm. longo; lamina chartacea, anguste oblongo-elliptica, lineari-oblongata vel oblanceolata 12--16 cm. longa, 2.5--6.5 cm. lata, apice longe caudata, attenuata vel acuminata, acumine acutiuscula, basi acuta vel recurvens, margine remote adpresso-serrata; flores albi, cymosi, cymis ad 9 cm. longis, longipedunculatis axillaribus et al apice ramorum dense pseudo-umbellatis; pedicelli ca. 2 mm. longi; sepala late ovata, ca. 1 mm. longa; petala 2--2.5 mm. longa.

Guatemala: Dept. Izabal, bordering Rio Cienaga, in zapotal at Cienaga, on the Izabal-Peten road, March 4, 1975, C. L. Lundell & Elias Contreras 19043 (holotype, LL), tree, 40 ft. high, 8 in. diam., flowers whitish; El Estor, in high forest, March 18, 1972, Contreras 11373 (LL), tree, 60 ft. high, 15 in. diam., flowers white.

This is the species which has been confused with O. oblanceolatum Lundell. It has been collected in the rain forest of the Department of Izabal, as well as downstream from Sebol in Alta Verapaz. The long caudate-acuminate apex of the leaves distinguishes it from O. oblanceolatum.

ORTHION MALPIGHIIFOLIUM (Standl.) Standl. & Steyerl., Field Mus. Bot. 22: 250. 1940. Hybanthus malpighiifolius Standl., Carnegie Inst. Wash. Publ. 461: 73. 1935.

Guatemala: Dept. of Peten, Camp 32 on the Guatemala (Peten)-British Honduras boundary, on hillside in forest shade, alt. 2100 ft., March 7, 1934, W. A. Schipp 1278 (holotype, F; isotype, LL), tree, 10 m. high, 15 cm. diam.

Belize: Toledo District, in high ridge, hill slope, near Mauga Camp, Edwards Road, beyond Columbia, March 30, 1948, Percy H. Gentle 6492 (LL), tree, 5 in. diam., white flowers, bark dark, wood brownish color, hard.

Although various collections from Guatemala and southern Mexico have been identified as O. malpighiifolium, only Gentle 6492 matches the type. So this taxon remains known from only two collections, both from the same rain forest area of southeastern Peten and adjacent Belize.

ORTHION MONTANUM Lundell, Wrightia 4: 115. 1969.

Mexico: Chiapas, Municipio of Jitotol, steep wooded slope on the bank of the Rio Hondo, 4 miles north of Jitotol on road to Pueblo Nuevo Solistahuacan, elev. 5500 feet, Feb. 12, 1965, D. E. Breedlove 8959 (holotype, LL), tree, 40 ft. tall.

The small cymes, solitary in the axils of the upper leaves, are similar to those of O. veracruzense Lundell, but the leaves of the two taxa differ. Both are known only from the type collections.

ORTHION OBLANCEOLATUM Lundell, *Lloydia* 4: 54. 1941.

Mexico: Chiapas, Rio Salinas, above mouth of Rio Pasion, on riverbank, Feb. 8, 1964, C. L. Lundell 17810 (LL), tree, 25 ft. high, flowers greenish. Veracruz, Municipio Catemaco, vicinity of Playa Escondida, 10 km. N of Sontecomapan, evergreen tropical forest, on slopes above Hotel Playa Escondida and the beach, alt. 0--150 m., April 6, 1983, M. Nee 26497 (LL), tree, 12 m. tall, 35 cm. diam., immature fruit and inflorescence branches light green.

Guatemala: Dept. Peten, in Montana San Simon en la margen del Rio Cancuen, in forest on riverbank, April 17, 1935, Mercedes Aguilar H. 497 (holotype, MICH; isotype, LL), a tree.

The Catemaco collection from Veracruz has smaller but typical leaves with prominent reticulate venation on lower surface. A short wide obtuse acumen and broad leaves oblanceolate-elliptic or obovate-elliptic serve to distinguish O. oblanceolatum.

Lundell 17810 from Chiapas matches the type of O. oblanceolatum, which was collected in Peten (Aguilar 497), and clearly distinguishes this species with its distinctive leaves, and inflorescences consisting of crowded elongated cymes borne at apex of stems.

ORTHION SUBSESSILE (Standl.) Steyerf. & Standl., *Field Mus. Pub. Bot.* 22: 250. 1940. Hybanthus subsessilis Standl., *Carnegie Inst. Wash. Publ.* 461: 72. 1935.

Mexico: Chiapas, Rio Salinas, above Rio Pasion, on riverbank, Feb. 8, 1964, C. L. Lundell 17819 (LL), tree, 4 in. diam., 20 ft. high, inflorescence greenish-white; Rio Lacantun, in high forest along bank of river, Feb. 9, 1964, Lundell 17868 (LL), tree, 4 in. diam., 30 ft. high.

Guatemala: Dept. of Peten, Lacandon, in bajo, about 1 km. 700 m. south, March 12, 1962, Elias Contreras 3515 (LL), tree, 25 ft. high, 8 in. diam. Dept. of Peten, Rio Pasion, ca. 3 km. above Altar de Sacrificios, in high forest on riverbank, Feb. 7, 1964, Lundell 17783 (LL), tree, 6 in. diam., 20 ft. high. Dept. of Izabal, Jocolo, Rio Perdonales, Harry Johnson 1071 (holotype, F); between Cienaga and Seja, on Peten-Guatemala road, May 28, 1971, Contreras 10875 (LL), tree, 35 ft. high, flowers white; same locality and date, Contreras 10876 (LL), tree, 40 ft. high, flowers white; same locality and date, Contreras 10877 (LL), tree, 60 ft. high, 12 in. diam., flowers white; El Estor, in high forest, Contreras 11157 (LL), tree, 60 ft. high, 15 in. diam., fruit green; El Estor, bordering Lake Izabal, in high forest, about 4 km. west of El Zapotillo, Jan. 29, 1975, C. L. Lundell & Elias Contreras 18894 (LL), small tree, 30 ft. high, 5 in. diam., flowers pale green.

Belize: Toledo District, Bolo Camp, upper reach of Golden Stream, in high ridge, April 5, 1944, Percy H. Gentle 4495 (LL), tree, 12 in. diam.; Toledo District, in cohune ridge, near creek,

near San Antonio, Jan. 22, 1946, Gentle 5495 (LL), tree, 9 in. diam., flowers white.

Of the species of Orthion, this is the most distinctive. Its large, thick, subsessile leaves are narrowed, rounded and emarginate at base, and its cymes are up to 20 cm. long with elongated peduncles. All the other species in the genus have distinctly petiolate leaves, with slender petioles, and much shorter cymes.

ORTHION VERACRUZENSE Lundell, sp. nov. -- Arbor parva, omnino glabra, ramulis gracilibus; folia chartacea, petiolata, petiolo 1--1.4 mm. longo; lamina viridis, oblongo-lanceolata vel lanceolata, 8--17 cm. longa, 2.5--6 cm. lata, apice acuminata, basi acuta vel acutiuscula, margine crenata vel subintegra; flores cymosi, cymis paucifloris longipedunculatis axillaribus, 3--6 cm. longis; pedicelli fructiferi 2--2.5 mm. longi, crassi; capsula subglobosa, parva, 8--10 mm. longa; semina globosa, ca. 4 mm. diam., laevia.

Mexico: Veracruz, Municipio Hidalgotitlan, cenotes 0.3 km. al O de La Raya, 6.5 km. al N de la Laguna, sobre camino al Poblado 7, elev. 130 m., March 30, 1981, Tom Wendt, A. Villalobos C. & I. Navarrete 3108 (holotype, LL), arbolito de 1.5--3 m., frutos verdes; abundante entre piedras en cenote.

The small solitary axillary cymes, small capsules, and mostly oblong-lanceolate rather large leaves are distinguishing features. It appears to be related to O. montanum Lundell.

Excluded Species of Orthion

MAYANAEA CAUDATA (Lundell) Lundell, Wrightia 5: 59. 1974. Orthion caudatum Lundell, Wrightia 4: 38. 1968.

Guatemala: Dept. Izabal, south shore of Lake Izabal between Izabal and Mariscos, at sea level, May 29, 1966, Gayle C. Jones & Lynden Facey 3512 (holotype, LL), tree, 8 m., fruits green; Peten-Guatemala road, in high forest on rocky hill, 6 km. from La Ruidoza, May 20, 1971, Elias Contreras 10790 (LL), tree, 40 ft. high, 10 in. diam., flowers whitish and lilac-violet; same locality and date, Contreras 10791 (LL), 10792 (LL), 10793 (LL), 10794 (LL); El Estor, in high forest, March 21, 1972, Contreras 11442 (LL), tree, 60 ft. high, 15 in. diam., flowers white.

A monotypic genus which is known only from the rain forest of the Department of Izabal in Guatemala. Aside from differences in the inflorescences and flowers, all parts of M. caudata dry blackish in contrast to the pallid or greenish leaves in the genus Orthion.